APPLICANT(S): MAGAL, Yosef

SERIAL NO.:

10/512,042

FILED: Page 2

October 21, 2004

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently amended) An improved thermostat and heat limitation arrangement for control of power to an electric hot water boiler, comprising:

a tubular structure supporting a first and a second electric switch arranged to be interposed in series between a power supply and an electric heating element[[,]];

an extended length a first bimetal device being arranged for thermal at least indirect contact with water being heated and being supported by said structure, said extended length <u>first</u> bimetal device comprising of a first pair of components made of materials being greatly different in the coefficient of linear thermal expansion, said first pair of components comprising a tubular component and a rod component at least one of said components being tubular and the remaining component projecting from said tubular component into said structure to open said first switch when said first bimetal device reaches a first desired temperature[[,]]; and

inside said first bimetal device a second bimetal device comprising of a second pair of components installed inside said tubular component of said first pair of components, wherein said second pair of components being made of materials being moderately different in their coefficient of linear thermal expansion, one of said second pair of components also projecting into said structure to open said second switch if said second bimetal device reaches a second temperature higher than said first desired temperature due to failure of said first bimetal device to open said first electric switch,

wherein said thermostat is installed within said boiler insertable into said water in said boiler for directly immersing into said water or for insertion in a tube immersed in said water.

2. (Previously presented) The thermostat as claimed in claim 1, wherein said second switch when opened remains in the open state until a reset control is manually operated.

APPLICANT(S): MAGAL, Yosef

SERIAL NO.: 10/512,042 FILED:

October 21, 2004

Page 3

3. (Previously presented) The thermostat as claimed in claim 1, wherein said extended length first bimetal device is composed of a brass outer tube and an invar central rod.

4. (Previously presented) The thermostat as claimed in claim 1, wherein said second bimetal device comprises a first of said materials being a stainless steel and a second of said materials being invar steel.